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Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

In the Matter of Applications for Consent to the Transfer of Control of Licenses	)	
COMCAST CORPORATION and AT&T CORP.,	)	
Transferors,	)	MB Docket No. 02-70
To	)	
AT&T COMCAST CORPORATION,	)	
Transferee.	)	

DECLARATION OF ROBERT H. GERTNER

I. QUALIFICATIONS

1. My name is Robert H. Gertner. I am Wallace W. Booth Professor of Economics and Strategy at the Graduate School of Business of the University of Chicago, where I have been a member of the faculty since 1986. I am also a Senior Vice President of Lexecon Inc., a law and economics consulting firm in Chicago. My research and teaching involves industrial organization (the study of individual markets which includes the study of antitrust, regulation, and business strategy), game theory (the formal study of strategic interdependence), law and economics, and corporate finance.

2. I have published articles on pricing and strategy in numerous economic journals, including the *Journal of Law and Economics,* the *RAND Journal of Economics,* the *Quarterly Journal of Economics,* and the *Journal of Finance.* I am co-author of *Game Theory and the Law* (Harvard University Press 1994), a book that applies the modern tools of game theory and information economics to legal issues. I have taught courses at the University of Chicago in competitive strategy, industrial organization, financial economics, corporate law, and antitrust law.

3. I have worked as a consultant on antitrust and other litigation issues as well as business strategy problems with major telecommunications firms. I received an A.B. summa cum laude from Princeton University in 1981, where I majored in economics, and a Ph.D. from the Massachusetts Institute of Technology in 1986, also in economics.

II. OVERVIEW AND SUMMARY OF CONCLUSIONS

4. I have been asked by SBC Communications Inc. to study the competitive impacts of the proposed acquisition of AT&T Broadband ("AT&T") by Comcast. I find that:

- The combination of the largest and third largest cable system operators will create a firm of unrivaled size in the multichannel video distribution ("MVPD") and broadband services businesses. The acquisition is likely to enhance the incentive and ability of the merged firm to engage in vertical foreclosure that reduces competition in the provision of video programming services, broadband Internet content and related services.
- The transaction increases the risk that DSL providers will be foreclosed from obtaining high-quality broadband Internet content. It also may increase the likelihood that the market for Internet broadband access services "tips" to cable modems and thereby reduces competition between alternative platforms for broadband access.
- Elimination of regulations now faced by ILECs in providing DSL services reduces these concerns and helps ensure that ILECs have the opportunity to compete effectively with AT&T Comcast (and other cable modem providers). The FCC should also consider: (1) requiring AT&T Comcast to unbundle some of its spectrum and provide that spectrum to other ISPs and (2) providing "open access" similar to the requirements imposed on Time Warner cable systems. The imposition of these requirements would impose regulatory costs but would also address the foreclosure concerns.

These concerns could also be remedied by conditions such as restrictions on the merged company's ability to enter into exclusive carriage arrangements with Internet content providers and providers of video programming services.

5. Section III of this paper reviews the pertinent background facts. Section IV explains why this merger (a) increases AT&T Comcast's bargaining power relative to that which AT&T, the larger of the two pre-merger firms, has currently; (b) risks foreclosure of some video programming services and broadband Internet content (or at least increasing the cost of such content) to competitors of AT&T Comcast; (c) risks harming competition between different broadband Internet access services and increases the risk of "tipping" broadband services in favor of cable modem services; and (d) risks reducing the diversity of video programming services and broadband Internet content. Section V identifies marketplace evidence that supports these conclusions. Section VI addresses issues raised by Microsoft's investment in AT&T Comcast. Finally, Section VII suggests steps the FCC should take or consider taking in connection with its review of this transfer application to address these concerns.

III. BACKGROUND

A. Merger of the First and Third Largest Cable Operators and Major Broadband Service Suppliers

6. AT&T Broadband and Comcast are the first and third largest cable operators, respectively, in the United States. Combined they will have roughly 23 million subscribers, nearly twice as many as AOL Time Warner. To place that number in context, the combined company ("AT&T Comcast") will have roughly 32 percent of all cable subscribers, and roughly 26 percent of subscribers of paid video programming services (including direct broadcast satellite, or "DBS" services) in the U.S.[1]

7. The combined company would also be the single largest provider of residential broadband Internet access services in the United States. As of the end of 2001, AT&T and Comcast together had roughly 2.5 million residential broadband

1. FCC, Eighth Annual Report on the Status of Competition in the Market for the Delivery of Video Programming, FCC 01-389, CS Docket No. 01-129, January 14, 2002, Table C-3.

Internet subscribers. That is 34 percent of all U.S. cable residential broadband subscribers and 23 percent of combined cable modem and DSL subscribers. [2]

B. The Merged Company Will Have Significant and Increasing Interests in Content

8. AT&T and Comcast hold interests in a wide variety of video program services, including both national and regional video networks. AT&T Broadband and Comcast reported their ownership interests in their Public Interest Statement for this merger.

- "Comcast owns attributable interests in seven national video program services – E! Entertainment (40%), The Golf Channel (91%), iN DEMAND (11%), QVC (58%), style. (40%), The Outdoor Life Network (100%), and Discovery Health Channel (20%) – and four regional program services – Comcast SportsNet (78%), cn8, The Comcast Network (100%), Comcast sports Southeast (72%), and Comcast SportsNet-MidAtlantic (100%). [And a 2% interest in Florida News Channel as well as various regional program services] … Comcast has announced that it will launch an additional new original programming network, the G4 Network, later this year."[3]

- "AT&T Broadband owns attributable interests in three national video program services – E! Entertainment (10%), style, (10%), and iN DEMAND (44%) – and attributable interests in three regional networks – Fox Sports New England (50%), New England Cable News (50%), and Pittsburgh Cable News Channel (30%)."[4]

- AT&T also holds a 25.5 percent interest in Time Warner Entertainment ("TWE").[5] TWE owns interests in HBO, Cinemax, Comedy Central, and CourtTV.[6]

9. The companies have declared their intention to acquire or develop more video and broadband content. With respect to video content, AT&T and Comcast claim

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2. Kinetic Strategies, "Cable Modem Market Stats & Projections," March 1, 2002, http://www.cabledatacomnews.com/cmic/cmic16.html.
3. AT&T Comcast Applications and Public Interest Statement before the FCC, February 28, 2002, p.70.
4. Ibid.
5. AT&T Comcast press release, "AT&T Broadband to Merge with Comcast Corporation in $72 Billion Transaction," December 19, 2001, http://www.pressnews.net/cmcsk/pr.htm.

they will develop more regional programming which, based on past practices, may not be made available to competing MVPDs.[7] With respect to broadband content, AT&T's Chairman and CEO has argued that broadband is a "[p]owerful platform for growth," and that the combined company will "[d]evelop new, and leverage existing, programming content."[8] AT&T Comcast is thus likely to expand its vertical integration by developing content for video and broadband distribution.

C. Microsoft Will Have a Significant Equity Stake in the Combined Company

10. Microsoft's previous multi-billion dollar investments in AT&T and Comcast will be converted into roughly 5 percent ownership of the merged firm.[9] Comcast, on behalf of the post-merger firm, has already made several commitments to Microsoft as part of the merger. For example, if AT&T Comcast provides open access to any third-party Internet service provider ("ISP"), it will provide access to the Microsoft Network ("MSN"), Microsoft's ISP, on non-discriminatory terms. Furthermore, Microsoft and Comcast have agreed to jointly conduct a trial during 2002 of an interactive TV platform with set-top box middleware.[10]

11. Microsoft has invested over $10 billion in cable companies around the world, including $5 billion in AT&T, $2.6 billion in Telewest in Britain, and $1 billion in Comcast.[11] These multi-billion dollar investments suggest that Microsoft anticipates business relationships with cable firms in furtherance of its strategic goals, which include the sale or licensing of its broadband software and middleware.[12]

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6. AT&T Comcast Applications and Public Interest Statement before the FCC, February 28, 2002, pp.70-71.
7. AT&T Comcast Applications and Public Interest Statement before the FCC, February 28, 2002, p.42.
8. Mike Armstrong, AT&T Chairman and CEO, presentation to Salomon Smith Barney Conference, January 7, 2002.
9. AT&T Comcast Applications and Public Interest Statement before the FCC, February 28, 2002, p.8.
10. AT&T Comcast Applications and Public Interest Statement before the FCC, February 28, 2002, p.8.
11. J. Grover and J. Rossant, "For Microsoft, It's 'Inactive TV'," Business Week, September 4, 2000.
12. See, for example, Bill Gates speaking at a CEO summit, http://www.microsoft.com/billgates/speeches/2001/05-23ceosummit.asp.

D. Economics of Video and Broadband Program Production and Cable System Bargaining Power

12. Content creation generally involves incurring relatively large fixed, sunk costs. For example, the FCC has estimated that launching a new cable network can cost between $100 and $125 million.[13] Revenues, however, generally depend on the number of viewers of the content through advertising or subscription fees. Thus entry is costly and content providers require large viewership to offset the substantial upfront costs. As the FCC has recognized:

> Networks may not have an incentive to enter the market or to be innovative in their programming if they do not anticipate being able to recover the fixed/sunk costs of network program development.[14]

13. The bargaining power of cable systems over new content is demonstrated by the fact that networks often must initially pay cable systems – often called "launch support" -- for carriage.[15] For example, TCI (now AT&T Broadband) charged one-time fees of $14 per subscriber to carry Fox News, and $8 per subscriber to carry Animal Planet. Even with 50 million subscribers, the Sci-Fi Channel offered $2 to $3 per subscriber in "launch support."[16]

14. The FCC has also noted that "some industry analysts believe that new networks cannot attract significant advertising until they surpass at least 30 million subscribers."[17] In a current example, the All Sports Network (sponsored by the NBA) will only be launched if it "reaches 25 million subscribers from its first day."[18] The location of subscribers may also be important. AT&T and Comcast have noted in their public interest filing that the merger will provide them with a market presence in eight of the top ten designated market areas ("DMAs") in the country, giving the merged

13. FCC, Third Report and Order on Horizontal Ownership Limits, FCC 99-289, MM Docket No. 92-264, October 20, 1999, ¶56.
14. FCC, Further Notice of Proposed Rulemaking re Cable Horizontal and Vertical Ownership Limits, FCC 01-263, September 21, 2001, ¶29.
15. FCC, Third Report and Order on Horizontal Ownership Limits, FCC 99-289, MM Docket No. 92-264, October 20, 1999, ¶56.
16. FCC, Third Report and Order on Horizontal Ownership Limits, FCC 99-289, MM Docket No. 92-264, October 20, 1999, footnote 115.
17. FCC, Third Report and Order on Horizontal Ownership Limits, FCC 99-289, MM Docket No. 92-264, October 20, 1999, ¶56.

company the "geographic market reach to sell advertising on a national scale."[19] However, by the same logic AT&T Comcast may be able to make it more difficult for companies to obtain national advertising by denying access to the dominant cable systems in many of the top DMAs.

15. These features are present for broadband Internet content provision as well as video content provision. IDATE, a research firm specializing in information and communications technologies, has noted that "developing high-speed content is a costly affair: high production costs, copyright royalties, etc."[20] Although relatively little content designed specifically for residential broadband users exists today, the experiences of online music sites, which are enhanced by broadband connections, are illustrative. For example, MP3.com was purchased by Vivendi Universal in August 2001 for roughly $400 million.[21] Launch Media raised roughly $81 million in its 1999 public offering.[22] These expenditures indicate that creating broadband content can be quite costly.

16. The tendency of web content to aggregate under brand name portals provides evidence of the importance to content providers of establishing preferred or exclusive relationships with key ISPs and/or Internet access providers. These brand name portals currently account for a large share of Internet audience.

- Nielsen/NetRatings has found that AOL Time Warner, Microsoft and Yahoo! were the three companies whose web sites attracted the most viewership in February 2002, or 55 percent of the total audience of the top 10 companies.[23]
- Jupiter Media Metrix found that the web sites of AOL Time Warner, MSN-Microsoft, and Yahoo! had the most visitors in March 2002. The

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18. Reuters, "AOL, NBA Need 25 Million Subscribers for Channel," April 12, 2002.
19. Pick Declaration, ¶29.
20. IDATE, "Consumer Portals: Gearing up for Broadband," October 1, 2001, p.83.
21. http://finance.vivendiuniversal.com/finance/download/pdf/6-K_FY01_150402.pdf
22. Launch Media 2000 10-K, p.17.
23. Nielsen//NetRatings press release, "Nielsen//Netratings Launches Marketview, The Industry's Most Comprehensive Internet Audience Measurement Service," March 18, 2002, http://www.nielsen-netratings.com/pr/pr_020318.pdf.

number four company had roughly half as many visitors as the number three.[24]

17. The high fixed costs and relatively small number of broadband subscribers suggest that, if anything, widespread carriage and/or affiliation with brand name portals may be even more important for broadband-specific content than for current Internet content. Moreover, as described below, cable modem services have by far the largest share of broadband users. DSL has been hampered by regulations that cable modem services are not subject to. Furthermore, DSL operators' ability to obtain content may be diminished as cable's share of broadband continues to grow.

IV. THE MERGER INCREASES AT&T COMCAST'S BARGAINING POWER AND ITS ABILITY AND INCENTIVE TO REDUCE COMPETITION

18. Most households get video programming services from a single provider; those that receive broadband internet access generally also have a single provider. Thus, a cable operator has the ability to provide or deny a content provider access to an important asset – its viewers. Generally, the larger the cable system, the greater its bargaining power over a programmer. One reason for this is simply that a larger cable system can supply more viewers for the same negotiating costs as a smaller system. These conditions are consistent with large cable operators being able to extract more favorable terms from content suppliers than smaller cable providers. The academic literature has in fact found this to be the case, and AT&T and Comcast believe it to be true as well since they claim that AT&T Comcast will be able to reduce its programming costs by up to $450 million per year, due in part to its "greater size."

19. Moreover, if the cable operator is sufficiently large, this power to deny access may prevent the content provider from reaching a sufficient number of consumers to cover its fixed costs, causing the provider to fail. The lack of favorable treatment by a cable modem service provider could also be harmful to broadband content providers. AT&T Comcast's incentives and ability to utilize different foreclosure strategies are likely to be increased in several instances due to the merger.

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24. http://www.jmm.com/xp/jmm/press/mediaMetrixTop50.xml.

A. Programming Foreclosure Incentives and Effects

20. The combined AT&T Comcast would have a greater ability to "make or break" content suppliers than either company individually. At least one analyst has asserted that "the Comcast deal is almost entirely about gaining leverage over programmers," noting that the ability to obtain carriage from "a 22 million-subscriber cable system could literally be the difference between make or break for a new programming venture."[25] This ability to leverage its subscriber base could place "AT&T Comcast in a position to extract higher launch fees or, resurrecting the TCI-Liberty model, some degree of equity ownership."[26]

21. The company would also have a number of reasons to do so. First, foreclosing a content provider may reduce "upstream" competition among content providers. For example, assume initially there are two ski channels competing, but large cable operator A denies access to Ski Channel, and only carries its competitor SkiTV. As a result, Ski Channel fails. Now, SkiTV faces less direct competition and can demand higher prices from cable operators C, D, and E, as well as DBS providers.

22. The benefits of this strategy for large cable operator A are particularly clear if it has a full or partial ownership interest in SkiTV, the surviving service. However, it can also benefit even if it does not own any part of SkiTV since it can extract some of the incremental monopoly profits (e.g., by obtaining lower prices) through its negotiation for carriage. A company that has the power to make another entity a monopolist can negotiate for some of the monopoly rents. Alternatively, SkiTV may never come into existence if investors fear that foreclosure is a significant possibility.

23. Second, foreclosure may reduce competition downstream, among distributors of television programming. Assume, for example, that cable operator A denies carriage to Ski Channel causing it to fail and signs an exclusive agreement with SkiTV such that SkiTV cannot be carried by competing distributors such as cable overbuilders or satellite for video programming or DSL for broadband. The result is to

25. Douglas Shapiro, Banc of America Securities, "Broadband Brief: Is the Balance of Power Swinging Toward Distribution?" January 11, 2002, pp.2-3.
26. Id.

raise the costs faced by rivals to cable operator A, which may lead to higher prices or lower quality in the provision of services offered by these rivals, thereby harming consumers.

24. When a large cable system increases its bargaining power vis-à-vis a programmer, the cable system will seek to obtain the programming at more favorable terms and conditions. One of those more favorable terms is often a lower price for carriage. (The cable system could also seek some other form of favorable treatment, such as exclusivity.) Generally, if the cable system is successful in lowering its price for programming (and, according to the transfer application, AT&T Comcast believes it will be successful and reduce its programming costs by hundreds of millions of dollars a year), several possible outcomes may occur. If some of those savings are passed along to consumers, AT&T Comcast customers will benefit from lower prices. However, the extraction of $250 to $450 million per year from content producers may have a variety of other effects which may vary from producer to producer.

25. For some producers it may simply be a transfer of rents to AT&T Comcast and may have little impact on their behavior. However, this is unlikely to be the case for all content producers. They may also react to a reduction in the price they receive from AT&T Comcast by seeking higher prices from other distributors and, if they cannot obtain those higher prices, exiting the market. These reactions are particularly likely when a marginal producer (one barely earning enough to cover its fixed costs) is faced with a reduction in price from AT&T Comcast.

26. A content producer may negotiate higher prices with other distributors to offset the reduced price from AT&T Comcast. If distributors pass some of these costs along to consumers then those consumers will be harmed. Since they live outside the AT&T Comcast area they will see no off-setting benefits from the merger. To the extent that this result raises the costs of rival video distributors such as DBS, AT&T Comcast may see this as a desirable outcome, but any reduction in competition would further harm consumers. Also, a marginal firm which is forced to accept a lower price from AT&T Comcast may simply exit the market. In this case all consumers would lose access to that content both in and out of AT&T Comcast's region.

27. There are a wide variety of content producers and each may react differently to the merged AT&T Comcast. Some likely can withstand a price reduction for AT&T Comcast without needing higher prices from other distributors; some likely cannot. It is impossible to predict which, or how many, firms will exit the market or negotiate for higher prices from other distributors. However, AT&T Comcast's ability to extract savings from content producers risks negative effects on customers of other video distributors.

28. These types of effects are not limited to video content and may be particularly relevant for broadband Internet content since the total number of residential broadband subscribers today (roughly 11 million) remains small compared to the number of video subscribers (roughly 88 million). If content development costs are similar (for example, some television shows today are generated entirely through computer graphics, a natural medium for broadband Internet content), then a new content provider must obtain access to a much larger proportion of broadband subscribers than to video subscribers in order to become profitable. Indeed, given the uncertainties of developing for a new medium, investors may require assurances of wide carriage before providing funding.

29. AOL Time Warner and AT&T Comcast together account for roughly 40 percent of all broadband subscribers in the United States.[27] Each has expressed the intention of vertically integrating into broadband content. Each accordingly may have an incentive to disadvantage independent competitors in the provision of broadband content such as Earthlink or Yahoo!. The merger increases the ability of AT&T Comcast to engage in such foreclosure since, if an independent broadband content provider such as Earthlink or Yahoo! is unable to obtain access on AOL Time Warner and/or AT&T Comcast systems, then it may be unable to obtain funding to develop content comparable to that of AOL or MSN. Thus, by foreclosing independent content, the cable operators could benefit from less competition when marketing their own content and could deny content to a competing broadband Internet access platform.

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27. Kinetic Strategies, "Cable Modem Market Stats & Projections," March 1, 2002, http://www.cabledatacomnews.com/cmic/cmic16.html.

B. Effect on Competing Broadband Distribution Services

30. As the FCC has previously recognized, cable modem services compete with other services such as DSL in the delivery of broadband Internet access and content. Furthermore, cable modem subscribership has consistently remained well above DSL subscribership. For example, as of June 2001, the FCC reported that cable modem services were providing roughly twice as many high-speed lines to residences and small businesses as ADSL services.[28] This trend has continued. Credit Suisse/First Boston noted that "Cable companies continue to dominate the race between DSL and cable modem to provide high-speed data service to US households. Cable modem subs outnumbered DSL subs by nearly two to one at the end of 2001."[29]

31. As noted above, AOL Time Warner and AT&T Comcast may also have an incentive to deny content to competing broadband technologies such as DSL, further cementing the lead of cable over DSL. This incentive could be made stronger by the fact that most analysts expect that the majority of broadband adoption will occur in the future. For example, the FCC's most recent report on the deployment of advanced services cites analysts predicting that cable and DSL combined will add over 30 million subscribers over the next few years, three quarters of which are predicted to choose cable modem services.[30] Exclusive content may be relatively more important in affecting consumer choice in a rapidly growing service such as broadband than in a more mature industry, such as multichannel video programming, in which customers can only be obtained by inducing them to switch from an existing provider. The threat of foreclosure of broadband content or video programming to DSL providers, therefore, may reduce investments in technology and reduce the speed of DSL deployment. If, for example, market participants believe there is a significant risk of video programming foreclosure to DSL providers, the technology for efficient distribution of video programming over

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28. FCC, Third Report on the Deployment of Advanced Services, FCC 02-33, CC Docket 98-146, February 6, 2002, Table 2.
29. Credit Suisse/First Boston, "Fourth Quarter DSL and Cable Modem Update," April 5, 2002, p.2.
30. FCC, Third Report on the Deployment of Advanced Services, FCC 02-33, CC Docket 98-146, February 6, 2002, ¶¶66, 71.

telephone lines may never be developed. This could reduce the effectiveness of competition between platforms.

32. Furthermore, in the presence of network externalities the industry may face a "tipping" problem. As analysts have noted, "many industry observers and, more importantly, potential customers have decided that DSL is an 'also ran' when compared to cable. Many DSL service providers, both competitive and incumbent, have responded by decreasing their DSL rollout plans, de-emphasizing DSL in their strategic portfolio, or even by leaving the DSL market altogether."[31] This problem may be exacerbated if cable providers become dominant in new services such as video on demand, particularly if the cable operators can disadvantage competitors through exclusive arrangements. In that case, ILECs may choose not to deploy fiber networks that could also offer video on demand and competition could be reduced as a result. All of these points help explain why now is such an important time in the evolution of broadband services.

33. Also, network externalities need not be inherent in the transmission medium itself but may be created deliberately in an effort to gain competitive advantage. For example, AOL Time Warner's instant messaging system is designed to be incompatible with competing systems. Thus if a customer wants to exchange instant messages with AOL instant messaging users, that customer, too, must become an AOL instant messaging user. AT&T Comcast and AOL Time Warner could pursue the same strategy with broadband content or interactive television services. For example, AT&T Comcast could offer an enhanced version of the Outdoor Network (a Comcast owned network) where clicking on a product would take the customer to the QVC web site (another Comcast owned property). Those capabilities could be tied to the set-top box through software (such as Microsoft's operating system), or to the use of AT&T Comcast software associated with Internet access. Thus competitors, even if they could obtain access to the Outdoor Network, could not use the enhanced capabilities. If cable continues to hold the lion's share of subscribers and technology or company-specific services become important, then DSL providers may find it increasingly hard to obtain similar services.

31. TeleChoice, "Why DSL Still Matters," March 25, 2002, p.15.

34. In particular, DSL is currently handicapped by regulation not faced by cable modem service providers. DSL is subject to a variety of resale and unbundling obligations that cable modem service providers do not face. These regulations disadvantage DSL providers generally by raising the costs of providing DSL and decreasing ILEC incentives to invest in DSL, either for deployment or innovation. The regulations also help cable firms such as AT&T and Comcast by allowing them to market Internet access services by reselling DSL services provided by others in areas not passed by cable providers. DSL operators, by contrast, can only market in the areas where DSL is available and cable providers are not obligated to offer cable modem services for resale.

35. The merger may exacerbate the situation because it increases the ability of AT&T Comcast to gain a competitive advantage through proprietary content. This outcome would be a direct result of the increased bargaining power of AT&T Comcast created by this merger.

C. Effects on Programming Diversity

36. Increased bargaining power and risk of foreclosure of independent content providers also has implications for content quality and diversity. The FCC has noted that:

> Excessive bargaining power could enable cable operators to reduce unduly the economic returns of programmers, causing them to curtail their activities and thereby limit the quality and diversity of programming fare.[32]

The FCC has previously discussed its desire to preserve diversity in programming. While this mandate may not have been extended to cover Internet content, the same reasoning applies there as well. As the FCC has noted

> Congress has ... indicated that a primary objective of the Act was to "rely on the marketplace to the maximum extent feasible, to promote the availability to the public of a diversity of views and information..."[33]

32. FCC, Further Notice of Proposed Rulemaking re Cable Horizontal and Vertical Ownership Limits, FCC 01-263, September 21, 2001, ¶26.
33. FCC, Further Notice of Proposed Rulemaking re Cable Horizontal and Vertical Ownership Limits, FCC 01-263, September 21, 2001, footnote 173.

37. Foreclosure may be of particular concern with respect to broadband content due to the relatively small number of customers available to cover the fixed costs of development. Indeed, it is possible that the smaller market will be unable to support the same level of diversity found in video programming. Even for the larger narrowband audience, there has been significant concentration of content. As noted previously, AOL and Microsoft own the most visited web sites in the United States. The vertical integration of AOL Time Warner and Microsoft into access as well as content may exacerbate the situation. The FCC has noted that large cable system operators tend to vertically integrate, and that the largest programming networks also tend to be vertically integrated.

> Vertical integration is not only associated with the largest cable system operators, but also the programming networks with the largest number of subscribers. Currently, nine of the top 20 video programming networks (ranked by subscribership) are vertically integrated with a cable MSO.[34]

The net result may be control of a majority of content by a handful of developers.

V. THERE IS MARKETPLACE EVIDENCE FOR CONCERNS REGARDING FORECLOSURE

38. Various regulations such as the horizontal ownership cap and program access rules have limited the ability to study the effects of large-scale mergers and foreclosure efforts. However, even with these constraints there is relevant empirical evidence. In particular, the empirical evidence suggests that companies have the incentives to engage in such behavior, and that their ability to do so increases with size.

A. Evidence Supports the Conclusion that Bargaining Power Increases with Size

39. A variety of empirical studies have examined whether larger cable operators are able to obtain lower prices for programming. While there is some debate within the literature as to the source of the discounts, i.e., bargaining power, reduced transaction costs or other efficiencies, there is little debate on the existence of the effect. Whatever the reason, larger cable operators pay lower prices for programming on a per subscriber basis.

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34. FCC, Eighth Annual Report on Competition in Markets for the Delivery of Video Programming, FCC 01-389, CS Docket No. 01-129, January 14, 2002, ¶159.

- Ford and Jackson (1997) find that "increases in MSO size enable cable operators to secure quantity discounts and enhanced bargaining power from program suppliers – both of which translate into lower programming prices paid by that MSO."[35]
- The General Accounting Office (1999) finds that "cable operators with a large subscriber base can obtain greater concessions, such as volume discounts, from programmers than small cable operators."[36]
- Dertouzos and Wildman (1998) note that rate cards provide for discounts based on number of subscribers, and that negotiated discounts typically exceed the basic rate card discounts.[37]
- Chipty (1995) finds that an increase in national size results in a decrease in the price paid for programming.[38]

40. AT&T and Comcast have made it clear that they expect to benefit from precisely such an effect. The Declaration of Robert Pick, attached to the merging parties' application, notes that AT&T Comcast expects to reduce its cable programming costs by $250 to $450 million relative to the pre-merger firms' costs. These savings will come, at least in part, due to "volume discounts achieved as a result of, among other things, AT&T Comcast's greater size…" (Pick Decl., ¶20). In particular, AT&T Comcast does not claim that these savings come from transaction cost savings or similar efficiencies. Rather, much of the savings come from obtaining the lower of the prices currently available to AT&T or Comcast, or, as noted, from increased volume discounts.

41. The FCC has expressed concern that such lower prices received by content providers might result in some independent networks being unable to launch.

> New networks might not be able to operate successfully subject to the lower prices that large operators are able to demand by virtue of their size. Launch

35. George Ford and John Jackson, "Horizontal concentration and vertical integration in the cable television industry," *Review of Industrial Organization* 12 (1997), p.513.
36. United States General Accounting Office, Telecommunications: Impact of Sports Programming Costs on Cable Television Rates, GAO/RCED-99-136, June 1999, p.11.
37. Dertouzos and Wildman, "Programming Access and Effects of Competition in Cable Television," Prepared for Ameritech New Media, August 14, 1998.
38. Tasneem Chipty, "Horizontal Integration for Bargaining Power: Evidence from the Cable Television Industry," *Journal of Economics & Management Strategy* 4:2 (Summer 1995), p.388.

> costs for a new cable network are estimated to be between $100 to $125 million. New networks often must initially pay for carriage. In addition, although advertising revenue is critical for a cable network's long-term success, some industry analysts believe that new networks cannot attract significant advertising until they surpass at least 30 million subscribers. In particular, niche networks targeting small audiences with specific interests have difficulty attracting advertising. [39]

The loss of independent networks creates risks of less diversity of programming.

B. MVPD Exclusive Carriage Arrangements Can Affect Competition and Programming Diversity

42. Cable companies are limited by regulation in their ability to reach exclusive carriage arrangements due to a requirement that programming which is transmitted via satellite must be made available to other carriers. However, in some instances cable companies have taken advantage of the limits of this rule – if the programming is carried strictly over terrestrial facilities, then it can be carried exclusively.

43. Comcast has taken advantage of this regulatory limitation to maintain exclusive carriage of regional sports in Philadelphia through its SportsNet network. The fact that Comcast chooses not to sell regional sports programming to other distributors in that region indicates that Comcast believes that the benefits of foreclosing access to that programming by other distributors exceed the revenues that Comcast forgoes due to its self-imposed restrictions on selling the content. Presumably, one of the principal benefits is that competing MVPDs such as DBS cannot offer particularly attractive local or regional content.

44. The FCC has noted that this sort of exclusive arrangement represents a barrier to entry for competitors.

> Noncable MVPDs that provide competitive pressure on incumbent cable operators and provide consumers with real choice still find regulatory and other barriers to entry in to markets for the delivery of video programming.

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39. FCC, Third Report and Order on Horizontal Ownership Limits, FCC 99-289, MM Docket No. 92-264, October 20, 1999, ¶56.

MVPDs with the potential to compete with incumbent cable operators continue to experience some difficulties in obtaining programming, both from vertically integrated satellite cable programmers and from unaffiliated program vendors who continue to make exclusive agreements with cable operators.[40]

45. Other evidence suggests that withholding such programming can indeed be a significant barrier to entry. First, returning to the Philadelphia example, DBS subscription rates appear to be lower in Philadelphia where regional sports programming is not available to them.

> While many factors can influence the DBS penetration rate in a particular market, the lack of regional sports programming appears to have reduced DBS subscribership in Philadelphia. For example, Table 1 [not reproduced here] presents data from Forrester Research showing that the DBS penetration rate in Philadelphia is by far the lowest of the top 20 cities in the United States. Indeed, the DBS penetration rate in Philadelphia is just 3.9 percent, or less than half the 9.3 percent weighted average for the top 20 cities (other than Philadelphia).[41]

46. Second, RCN, a cable overbuilder, has reported polling data that 40 to 58 percent of cable customers would be reluctant to subscribe to a cable service without local sports programming.[42] These data are consistent with the experience of DBS.

47. There is also evidence that new programming services affiliated with MVPDs have a greater likelihood of success than new independent programming and that the MVPDs with the greatest number of subscribers are most likely to vertically integrate into the provision of video content. The FCC has reported that

> Vertical integration is not only associated with the largest cable system operators, but also the programming networks with the largest number of subscribers. Currently, nine of the top 20 video programming networks

40. FCC, Fifth Annual Report on Competition in Markets for the Delivery of Video Programming, FCC 98-335, CS Docket No. 98-102, December 23, 1998, ¶11.
41. J. Orszag, P. Orszag, and J. Gale, "An Economic Assessment of the Exclusive Contract Prohibition Between Vertically Integrated Cable Operators and Programmers," filed with EchoStar and DirecTV Reply Comments before the FCC, CS Docket No. 01-290, January 2002, pp.22-23.
42. Comments of RCN Telecom Services, Inc. before the FCC, CS Docket No. 01-290, December 3, 2001, p.18.

> (ranked by subscribership) are vertically integrated with a cable MSO. This figures remains unchanged from 2000. Additionally, it appears that a significant amount of video programming is controlled by only 14 companies, including cable MSOs, broadcasters, and other media entities. Almost all (i.e., 18) of the top 20 programming networks in terms of subscribership are owned by one or more of these 14 companies, with nine of these networks vertically integrated with cable MSOs. In addition, seven out of the top 20 video programming networks ranked by prime time ratings are vertically integrated with cable MSOs.[43]

48. The same sort of effect appears to hold for broadband content as well. As IDATE, a research firm, explains:

> A high bandwidth consumer, broadband broadcasting is a costly endeavour. To develop a broadband portal, partnerships between high-speed network operators and high-speed content providers are frequently required.[44]

49. The result is that the merger risks making it more difficult for independent broadband content suppliers to develop and market their content. AOL Time Warner and AT&T Comcast have each already expressed the intent to develop their own broadband content, so each is unlikely to be interested in purchasing competing content from companies such as Earthlink and Yahoo!. Earthlink, Yahoo! and others, in turn, would be faced with the prospect of negotiating with multiple smaller distributors in order to obtain sufficiently large consumer access to justify development, assuming that they could obtain such a number at all without the cooperation of AOL Time Warner or AT&T Comcast. The loss of independent content creates risks of less diversity of programming.

C. Large Cable Firms May be Able to "Make or Break" Content Providers

50. With roughly a quarter of all video and broadband subscribers, AT&T Comcast may have the ability to unilaterally "make or break" a content provider. The FCC has expressed concern about this possibility even at lower levels of concentration. In the AT&T Media One merger, the FCC noted that

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43. FCC, Eighth Annual Report on Competition in Markets for the Delivery of Video Programming, FCC 01-389, CS Docket No. 01-129, January 14, 2002, ¶159.
44. IDATE, "Consumer Portals: Gearing up for Broadband," October 1, 2001, p.79.

> Start-up video programmers need to reach a critical level of subscribership quickly in order to achieve long-term financial viability. Video programmers' need for a large number of subscribers confers on AT&T, MediaOne, and TWE, which have access to a large number of subscribers, significant bargaining power.[45]

Indeed, the FCC concluded in its Third Report and Order on Horizontal Ownership Limits that

> Cable operators still have the power to decide which cable networks will "make it" even as channel capacity grows.[46]

51. Comcast acknowledged that cable systems can "make or break" content providers when one of its wholly owned networks, Outdoor Life Network, filed for an exception to the ban on exclusive carriage in which it stated that

> carriage on the nation's cable systems is vital to [its] ability to achieve the subscriber penetration levels necessary to become and remain commercially viable, and that unless they are able to increase their subscriber penetration "rapidly and substantially," they will be unable to generate the revenues essential to their survival.[47]

As noted above, the NBA's All Sports Network will be launched only if it "reaches 25 million subscribers from its first day."[48]

52. The fact that new networks often must initially pay for carriage highlights the importance of widespread cable carriage to success. As noted above, AT&T (TCI) charged $14 and $8 per sub to launch Fox News and Animal Planet, respectively, and even with nearly 50 million subscribers, Sci-Fi channel offered $2 to $3 in launch support and free carriage in some instances.[49] As discussed above, the larger the cable system, the more bargaining power over programmers it is likely to have. As one analyst noted,

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45. FCC, AT&T MediaOne Order, FCC 00-202, CS Docket No. 99-251, June 6, 2000, ¶51.
46. FCC, Third Report and Order on Horizontal Ownership Limits, FCC 99-289, MM Docket No. 92-264, October 20, 1999, ¶14.
47. FCC, Outdoor Life Network and SpeedVisionNetwork Petition for Exclusivity Order, 13 FCC Rcd 12226, June 26, 1998, ¶6.
48. Reuters, "AOL, NBA Need 25 Million Subscribers for Channel," April 12, 2002.
49. FCC, Third Report and Order on Horizontal Ownership Limits, FCC 99-289, MM Docket No. 92-264, October 20, 1999, footnote 115.

the merger would put "AT&T Comcast in a position to extract higher launch fees or, resurrecting the TCI-Liberty model, some degree of equity ownership."[50]

D. The Merger Will Likely Increase the Areas Where AT&T's Video Aggregation Service HITS Is Unavailable

53. Anyone offering video distribution service must obtain content. Large cable systems may do this by setting up a headend with multiple satellite receivers in order to obtain direct transmission of various programming. We understand that such a headend typically costs around $500,000. However, new entrants may reduce this cost substantially by obtaining content aggregated by a third party. AT&T offers such a service -- a video content aggregation service called Headend in the Sky ("HITS"). This service is typically marketed to small cable companies and multiple dwelling unit ("MDU") providers, although companies using other technologies such as MMDS and fiber to the home may also use it. An entrant using HITS can build a headend for around $30,000, a substantial savings compared to the $500,000 for a full headend.[51]

54. AT&T aggregates over 150 channels, including pay per view, and then divides them up into 13 blocks which can be purchased individually. We understand that HITS is often marketed through wholesalers such as WSNet. WSNet combines HITS' content with content from other sources and offers a bundled content/hardware package to its customers.[52]

55. SBC has advised me that AT&T has prohibited WSNet from providing HITS services to cable overbuilders or other firms which compete with AT&T cable systems. In particular, AT&T has prohibited WSNet from providing content to SBC's fiber-based video distribution system in an AT&T franchise area in California.

56. Video distribution customers of all types can currently obtain HITS service in Comcast areas. Assuming the merged firm continues AT&T's current policy with respect to the sale of HITS within its franchise areas, then after the merger HITS

50. Douglas Shapiro, Banc of America Securities, "Broadband Brief: Is the Balance of Power Swinging Toward Distribution?" January 11, 2002, pp.2-3.
51. Cable companies must still supply their analog channels, including local programming and public access requirements. These are readily available, however.
52. www.wsnet.tv

service will not be available to overbuilders in Comcast franchise areas. This development will both disadvantage current competitors and raise costs for potential new MVPD entrants.

E. The FCC Should Use its Investigatory Powers to Obtain Any Available Evidence.

57. The extent of the adverse effects on consumers for the reasons set forth above is difficult to quantify given the limited publicly available data on cable pricing and the nascent nature of broadband services. For example, it is not possible, with publicly available data, to determine the specific scale necessary for a cable provider to have the power to "make or break" a specific content provider. Thus, I cannot quantify empirically the amount of anticompetitive foreclosure created by this merger. Data required to analyze these questions are held by the cable companies themselves, or by companies which must do business with the cable companies to survive. Because of their dependence on cable companies, content providers may be understandably reluctant to provide detailed information voluntarily to parties opposing cable company interests.

58. The FCC, however, has the authority to obtain information directly from the parties involved and should use its investigatory powers to obtain any available evidence. Among other possibilities, the FCC can investigate the cost structures of content providers, both independent and vertically integrated, and the effects of changes in MVPD size on the prices and terms for differently sized distributors. The FCC may also investigate the merging company's business plans with respect to broadband content, particularly in terms of sale of that content to third parties such as DSL providers, interactive television content and software, and their forecasts with respect to broadband services.

VI. THE RISKS OF HARM TO COMPETING BROADBAND PLATFORMS MAY BE FURTHER COMPOUNDED BY THE ROLE OF MICROSOFT IN THE MERGED COMPANY

59. Microsoft's involvement in the merger may create competition concerns in several ways. First, Microsoft's multi-billion dollar investments in the companies, which will be converted to a 5 percent equity investment in the post-merger firm, may put Microsoft in a position to skew the market for set-top boxes in its favor or to assure that

its operating system is used within those boxes. Second, Microsoft may be in a position to assure favorable treatment of its MSN ISP service as compared to the access provided to other ISPs that are not affiliated with the cable company. Finally, Microsoft's arrangements might provide Microsoft with such an advantage (*vis-à-vis* Microsoft's role in DSL) that Microsoft becomes a proponent of cable modem services and makes it more difficult for alternative broadband platforms to compete. Microsoft could do so in a variety of ways. For example, it could incorporate functions into the set-top box and its own content that would not be available to DSL end-users. It may also work with cable modem suppliers to cache content at their headends, providing a superior experience when interacting with Microsoft content. Microsoft may also offer marketing assistance, such as icons on the operating system's loading screen that offer customers the opportunity to order cable broadband services.

60. As part of the merger Microsoft has already obtained agreements for AT&T Comcast to use Microsoft software as part of an interactive television trial to be jointly run by Microsoft and AT&T Comcast, and for MSN to be carried by any AT&T Comcast cable system that carries any third party ISP. Also, Mitchell Kertzman, chief executive of Liberate Technologies, an interactive television software developer, has testified that Microsoft has attempted to buy parts of cable companies in order to require them to distribute its software. He cited Microsoft's attempted $3 billion investment in Telewest Communications, a deal which was cancelled after an inquiry by European Union antitrust authorities.[53]

VII. THERE ARE SEVERAL CONDITIONS THE FCC SHOULD CONSIDER TO REDUCE THE RISK OF ANTICOMPETITIVE BEHAVIOR

61. As discussed above, the proposed merger risks harming some consumers. The Commission should, therefore, carefully consider whether conditions or other actions should be imposed to mitigate the risks identified here.

62. In particular, the Commission should eliminate the regulatory asymmetry that currently exists between cable modem and DSL broadband services by eliminating DSL regulation faced by ILECs. The anticompetitive strategic behaviors by leading

MVPDs are contingent upon their controlling a significant portion of the subscriber base. Regulatory constraints imposed on DSL providers make it more difficult for them to compete for that subscriber base by decreasing incentives to deploy DSL services and to upgrade local phone systems to provide these services to larger numbers of households. These regulatory constraints raise the costs and limit the potential rewards from offering DSL services. Combined with DSL's position as a distant second to cable modem services in the provision of broadband Internet access, DSL providers are more vulnerable to strategic behavior by a leading cable firm. Deregulation of DSL services provided by ILECs can reduce the risk of harm to competition by increasing the likelihood of robust competition between platforms, even in the presence of a large cable firm such as AT&T Comcast. That is, elimination of regulatory constraints may reduce both the incentives and ability for the merged firm to engage in the conduct at issue. I understand that the Commission is currently examining whether to remove or significantly reduce this regulatory asymmetry. This proposed merger highlights the importance of doing so promptly before DSL lags even farther behind its cable competitors.

63. The FCC should also consider whether restrictions should be imposed to reduce the ability of the post-merger firm to foreclose video and broadband content to competitive video and broadband content distributors. One alternative to consider that would impose regulatory costs but would also address the foreclosure concerns is open access.

64. One method of providing access to AT&T Comcast's networks is to unbundle spectrum and provide it to competing ISPs. Such unbundling would be similar to the current line sharing or unbundled network obligations faced by ILECs. This method would allow competitive ISPs greater control over their services and a greater ability to differentiate their service from AT&T Comcast than the open access requirements imposed on Time Warner cable systems in the AOL-Time Warner merger, but would entail a variety of costs in establishing and maintaining the procedures and support mechanisms for the unbundling.

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53. Amy Harmon, "Executive Fearful of Microsoft in Interactive TV Software," New

65. An alternative form of open access is the logical level currently required of the Time Warner cable systems. This form is more akin to resale than line sharing or unbundling but may still provide some protection against foreclosure. Should the FCC decide to impose open access, it should evaluate the progress and effectiveness of the previous open access obligations imposed on the Time Warner systems.

66. In addition to the remedies discussed above, the FCC should evaluate whether AT&T Comcast should be required to license all of its programming content – including regional sports programming – to competitive distributors at non-discriminatory prices, terms and conditions.

67. This concludes my declaration.

[signature page follows]

York Times, April 3, 2002.

I declare under penalty of perjury that the foregoing is true and correct to the best of my knowledge.

Executed on April 25, 2002.

Robert H. Gertner

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Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

In the Matter of Applications for Consent to the Transfer of Control of Licenses COMCAST CORPORATION and AT&T CORP., Transferors, To AT&T COMCAST CORPORATION, Transferee.	)))))))))))))))	MB Docket No. 02-70

DECLARATION OF DENNIS W. CARLTON

1. I, Dennis W. Carlton, am Professor of Economics at the Graduate School of Business of The University of Chicago. I have served on the faculties of the Law School and the Department of Economics at The University of Chicago and the Department of Economics at the Massachusetts Institute of Technology. I specialize in the economics of industrial organization, which is the study of individual markets and includes the study of antitrust and regulatory issues. I am co-author of Modern Industrial Organization, a leading textbook in the field of industrial organization, and I also have published numerous articles in academic journals and books. In addition, I am Co-Editor of the Journal of Law and Economics, a leading journal that publishes research applying economic analysis to industrial organization and legal matters. In addition to my academic experience, I am a consultant for and former President of Lexecon Inc., an economics consulting firm that specializes in the application of economic analysis to legal and regulatory issues.

2. I have been asked by SBC Communications Inc. and Qwest Communications International to review and comment on the declaration filed in this proceeding by Prof. Robert Gertner of the Graduate School of Business of the University of Chicago regarding the potential harm to competition resulting from the proposed merger of AT&T Broadband and Comcast, in light of my previous testimony in support of the elimination of regulation faced by ILECs in the provision of DSL services. [1]

3. I understand that:

- The proposed transaction combines the first and third largest operators of cable systems, which together will account for 32 percent of cable television subscribers and 26 percent of subscribers to paid video programming services in the United States.
- The proposed transaction creates the single largest provider of residential broadband Internet access services in the United States, accounting for 34 percent of cable residential broadband subscribers and 23 percent of combined cable and DSL subscribers.

4. Since the AT&T and Comcast cable franchise areas do not overlap, the transaction does not reduce the number of providers of video programming services or broadband Internet services available to any consumer and so raises no antitrust concerns regarding horizontal competition. However, even if a transaction raises no antitrust concerns regarding horizontal competition, it is well understood that it could raise vertical concerns that translate into a reduction in competition and a harm to consumers.

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1. Declaration and Reply Declaration of Kenneth Arrow, Gary Becker and Dennis Carlton, *In the Matter of Inquiry Concerning High-Speed Access to the Internet Over Cable and Other Facilities*: Before the Federal Communications Commission, Washington DC, Docket No. 00-185, December 1, 2000 (Declaration), and January 10, 2001 (Reply Declaration) (submitted on behalf of Verizon).

5. Professor Gertner's declaration clearly explains the economic theories under which vertical concerns could arise in this case. Professor Gertner explains how the transaction may harm competition by creating the incentive and ability of AT&T/Comcast to foreclose or otherwise disadvantage suppliers of video programming services and/or broadband Internet content services that are unaffiliated with the merged cable systems. This, in turn, can adversely affect competition in the provision of multichannel video distribution services and/or broadband Internet access services.

6. As an example of the theory explained by Professor Gertner, a transaction could adversely affect competition where carriage by a large cable operator is required for a supplier of video programming and/or broadband Internet content to realize important scale economies. Such a cable operator could be able to determine which firms will succeed in the provision of video or broadband content and can extract some of the resulting monopoly profits. By creating market power in the provision of video content, behavior of this type can raise the cost of content to other cable systems and thus harm consumers served by these systems. Similarly, such behavior can create market power in the provision of broadband Internet content. This, in turn, can disadvantage suppliers of DSL services, such as SBC and Qwest, that compete with cable modem services supplied by AT&T/Comcast.

7. The foreclosure theories of the type discussed by Professor Gertner are well-recognized in the economic literature and are the focus of substantial concern among antitrust enforcement agencies.[2] An empirical assessment of the potential adverse effect of the transaction on competition, given the limitations of available data, likely requires access to non-

2. See, for example, M. Winston, "Tying, Foreclosure, and Exclusion," 80 American Economic Review 1 (1990); D. Carlton, "A General Analysis of Exclusionary Conduct and Refusal to Deal – Why Aspen and Kodak are Misguided," 68 Antitrust Law Journal 659 (2001); and J. Choi and C. Stefandis, "Tying, Investment and Dynamic Leverage Theory," 32 Rand Journal of Economics 52 (2001).

public information. I urge the Commission to use its investigatory powers to analyze carefully the empirical importance of the issues raised by Professor Gertner.

8. If the Commission determines that the transaction raises legitimate foreclosure-related concerns, then relaxation of regulations now faced by ILECs in the provision of DSL services is likely to reduce vertical antitrust concerns by making DSL a more potent competitive force. While I have advocated elimination of these regulations in the past for entirely different reasons, a conclusion by the FCC that the proposed transaction raised significant foreclosure concerns would only serve to heighten the rationale for elimination of these regulations.

9. Despite competition from cable modem services, which account for roughly two-thirds of mass market broadband Internet services, ILECs face a variety of FCC regulations relating to their provision of DSL services. Among other things, these regulations require ILECs to share local loops with competitive DSL providers at favored rates, provide DSL service on a wholesale basis for resale, and establish tariffs with cost-based rates.

10. Such regulations are likely to deter investment in DSL services and are likely to harm competition between DSL and cable modem services. As I have explained in other testimony before the Commission (co-authored with Kenneth Arrow and Gary Becker), elimination of the regulations that apply to DSL but not to cable modem services would likely promote competition between DSL and cable modem services. By making DSL a more potent force, foreclosure concerns associated with this transaction are mitigated. In that statement, we concluded that:

> The potential harm from application of these rules in the presence of competition between technologies is heightened due to rapid innovation in the provision of broadband Internet access. These circumstances complicate the design of efficient regulation and risk delay in the development and deployment of new services, which are important contributors to improvements in consumer welfare. Under these circumstances, competition, not regulation,

should determine which technologies and services succeed in the marketplace.[3]

11. Elimination of these regulations would be likely to enhance the ability of ILECs to compete in the provision of broadband Internet services without raising significant risks of harm to competition. A finding by the FCC that the proposed transaction raises risk of harm to competition further reinforces the need to eliminate these rules.

12. This concludes my declaration.

[signature page follows]

3. Declaration of Kenneth Arrow, Gary Becker and Dennis Carlton, December 1, 2000, ¶37.

I declare under penalty of perjury that the foregoing is true and correct to the best of my knowledge.

Executed on April 26, 2002.

Dennis W. Carlton